

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **11354683 A**

(43) Date of publication of application: 24 . 12 . 99

(51) Int. Cl

H01L 23/12

(21) Application number: 11010337

(22) Date of filing: 19 . 01 . 99

(30) Priority: 30 . 05 . 98 KR 98 9820097

(71) Applicant: **LG SEMICON CO LTD**

(72) Inventor: **GO SEIKO**

(54) SEMICONDUCTOR PACKAGE AND
MANUFACTURE THEREOF

COPYRIGHT: (C)1999,JPO

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a stackable BGA semiconductor package which enables manufacture of a stackable type BGA semiconductor package, and a method for manufacturing thereof.

SOLUTION: A BGA semiconductor package comprises a lower insulation substrate 51, having a recess at the center of the upper surface and an upper insulation substrate 71 having a through-hole and the upper surface of the lower insulation substrate 51 and lower surface of the upper insulation substrate 71 are bonded facing opposite. In the BGA semiconductor package, a predetermined number of through-holes 55, 77 which pierce both insulation substrate at the same position, and in which conductive balls 95 contacting metal films 57, 77 coated on the surroundings are respectively formed on each substrate. The diameters of the through-holes 55, 57 are larger at the bonding side of both insulation substrates and smaller at the opposite side.

